Showline

SL BAR 520 RGBW LED Luminaire



Showline Offices

Dallas

10911 Petal Street Dallas, TX 75238 Tel: +1 214-647-7880 Fax: +1 214-647-8030

Asia

Unit C, 14/F, Roxy Industrial Centre No. 41-49 Kwai Cheong Road Kwai Chung, N.T., Hong Kong Tel: +852 2796 9786 Fax: +852 2798 6545

Auckland

19-21 Kawana Street Northcote, Auckland 0627 New Zealand Tel: +64 9 481 0100 Fax: +64 9 481 0101

Europe

Rondweg zuid 85 Winterswijk 7102 JD The Netherlands Tel: +31 (0) 543-542516

www.philips.com/showline

The material in this manual is for information purposes only and is subject to change without notice. Showline assumes no responsibility for any errors or omissions which may appear in this manual. For comments and suggestions regarding corrections and/or updates to this manual, please contact your nearest Showline office.

El contenido de este manual es solamente para información y está sujeto a cambios sin previo aviso. Showline no asume responsabilidad por errores o omisiones que puedan aparecer. Cualquier comentario, sugerencia o corrección con respecto a este manual, favor de dirijirlo a la oficina de Showline más cercana.

Der Inhalt dieses Handbuches ist nur für Informationszwecke gedacht, Aenderungen sind vorbehalten. Showline uebernimmt keine Verantwortung für Fehler oder Irrtuemer, die in diesem Handbuch auftreten. Für Bemerkungen und Verbesserungsvorschlaege oder Vorschlaege in Bezug auf Korrekturen und/oder Aktualisierungen in diesem Handbuch, moechten wir Sie bitten, Kontakt mit der naechsten Showline-Niederlassung aufzunehmen.

Le matériel décrit dans ce manuel est pour information seulement et est sujet à changements sans préavis. La compagnie Showline n'assume aucune responsibilité sur toute erreur ou ommission inscrite dans ce manuel. Pour tous commentaires ou suggestions concernant des corrections et/ou les mises à jour de ce manuel, veuillez s'il vous plait contacter le bureau de Showline le plus proche.

Note: Information contained in this document may not be duplicated in full or in part by any person without prior written approval of Showline. Its sole purpose is to provide the user with conceptual information on the equipment mentioned. The use of this document for all other purposes is specifically prohibited.

Document Number: SL BAR 520 RGBW LED Luminaires Users
Version as of: 12 December 2013

SL BAR 520 RGBW LED Luminaire Installation & User's Manual ©2013 Philips Group. All rights reserved.

IMPORTANT INFORMATION

Warnings and Notices

When using electrical equipment, basic safety precautions should always be followed including the following:

a. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.



- b. Do not use outdoors.
- c. Do not mount near gas or electric heaters.
- d. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- e. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- f. Do not use this equipment for other than intended use.
- g. Refer service to qualified personnel.

SAVE THESE INSTRUCTIONS.



WARNING: You must have access to a main circuit breaker or other power disconnect device before installing any wiring. Be sure that power is disconnected by removing fuses or turning the main circuit breaker off before installation. Installing the device with power on may expose you to dangerous voltages and damage the device. A qualified electrician must perform this installation.

WARNING: Refer to National Electrical Code® and local codes for cable specifications. Failure to use proper cable can result in damage to equipment or danger to personnel.

WARNING: This equipment is intended for installation in accordance with the National Electric Code® and local regulations. It is also intended for installation in indoor applications only. Before any electrical work is performed, disconnect power at the circuit breaker or remove the fuse to avoid shock or damage to the control. It is recommended that a qualified electrician perform this installation.

Additional Resources for DMX512

For more information on installing DMX512 control systems, the following publication is available for purchase from the United States Institute for Theatre Technology (USITT), "Recommended Practice for DMX512: A Guide for Users and Installers, 2nd edition" (ISBN: 9780955703522). USITT Contact Information:

USITT 315 South Crouse Avenue, Suite 200 Syracuse, NY 13210-1844 Phone: 1.800.938.7488 or 1.315.463.6463

www.usitt.org

Showline Limited Two-Year Warranty

Showline offers a two-year limited warranty of its luminaires against defects in materials or workmanship from the date of delivery. A copy of Showline two-year limited warranty containing specific terms and conditions can be obtained by contacting your local Showline office.



TABLE OF CONTENTS

Showline Offices	. Inside Front Cove
IMPORTANT INFORMATION	
Warnings and Notices	
Additional Resources for DMX512	
Showline Limited Two-Year Warranty	
TABLE OF CONTENTS	
PREFACE	
About this Manual	4
Included Items	4
Accessories	
SL BAR 520 RGBW LED Luminaire Power Input Cables (North American Models Only)	
SL BAR 520 RGBW LED Luminaire Accessories	
SL BAR 520 RGBW LED LUMINAIRE OVERVIEW	
SL BAR 520 RGBW LED Luminaire Components	
Major Luminaire Components	
LCD Display / Menu System	
INSTALLATION AND SET UP	
Power Requirements	
AC Power Operation	
Connecting Power	
Connecting SL BAR 520 RGBW LED Luminaires to AC Power	
Connecting to the DMX512 Network	
Mounting Luminaire	
Connecting & Mounting Multiple Luminaires	
Connecting Luminaires Top-to-Bottom	
Connecting Luminaires Side-to-Side	
Mounting SL BAR 520 RGBW LED Luminaire with Other Luminaires	
Connecting Combined Luminaires Top-to-Bottom	
Connecting Combined Luminaires Side-to-Side	
OPERATION AND PROGRAMMING	
LCD Display and Menu System	14
LCD Display and Menu System Operation	
SL BAR 520 RGBW LED Luminaire Main Menu Options Presets	
Recalling or Editing Presets	
Color Filter	
Effects	
Editing User Chases	
Editing osci Chases Edit Rainbow	
	10
Settings/Security	
Settings/General	
Settings/Factory Default	
Settings/DMX	
Settings/DMX Control Channel	
Settings / LED Group	
Settings/Display	
Lock Fixture	
Password (PassPIN)	
Status	
Quick Selection Buttons	23
DMX Address	23
Harmonize Color Calibration	24
Dimming Curve Selection	
Master / Slave Operational Mode	



TECHNICAL SPECIFICATIONS

DMX CONTROL 27 16-Bit Mode 30 RGBW 8-Bit Group Modes 31 RGBW 8-Bit Group Modes 34 Simple RGBW 8-Bit Mode 35 RGBW Simple 8-Bit Group Modes 36 HSIC Mode 37 HSIC Group Modes 38 SL BAR 520 RGBW LED Luminaire DMX Timing Channel Detail 39 SL BAR 520 RGBW LED Luminaire RDM Parameter IDs 45 CLEANING AND CARE 49 Front Lens Cleaning and Care Instructions 49 Front Lens Cleaning 49

Service and Maintenance 49



PREFACE

1. About this Manual

The document provides installation and operation instructions for the following products:

• SL BAR 520 RGBW LED Luminaire

Please read all instructions before installing or using this product. *Retain this manual for future reference*. Additional product information and descriptions may be found on the product specification sheet.

Note: The SL BAR 520 RGBW LED Luminaire is universal voltage 100 to 240 VAC (auto-ranging).

2. Included Items

Each SL BAR 520 RGBW LED Luminaire includes the following items:

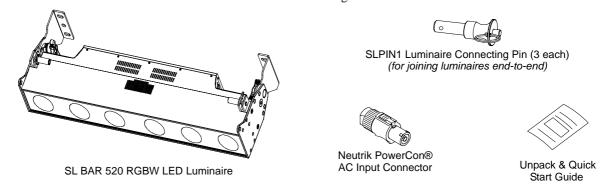


Figure 1: Included Items

3. Accessories

SL BAR 520 RGBW LED Luminaire Power Input Cables (North American Models Only)

Part Number	Description
PC1BE	SL BAR 520 RGBW LED Luminaire AC Power Input Cable (39 inches / 1 meter), Powercon with Bare End* (*Note, user supplies and installs own AC input connector)
PC1GP	SL BAR 520 RGBW LED Luminaire AC Power Input Cable (39 inches / 1 meter), Powercon with Stagepin Connector
PC1GTL	SL BAR 520 RGBW LED Luminaire AC Power Input Cable (39 inches / 1 meter), Powercon with Twistlock Connector
PC1GR	SL BAR 520 RGBW LED Luminaire AC Power Input Cable (39 inches / 1 meter), Powercon with Edison Connector
PC3BE	SL BAR 520 RGBW LED Luminaire AC Power Input Cable (9.8 Feet / 3 meter), Powercon with Bare End* (*Note, user supplies and installs own AC input connector)
PC8BE	SL BAR 520 RGBW LED Luminaire AC Power Input Cable (26 Feet / 8 meter), Powercon with Bare End* (*Note, user supplies and installs own AC input connector)
PC8GR	SL BAR 520 RGBW LED Luminaire AC Power Input Cable (26 Feet / 8 meter), Powercon with Edison Connector

SL BAR 520 RGBW LED Luminaire Accessories

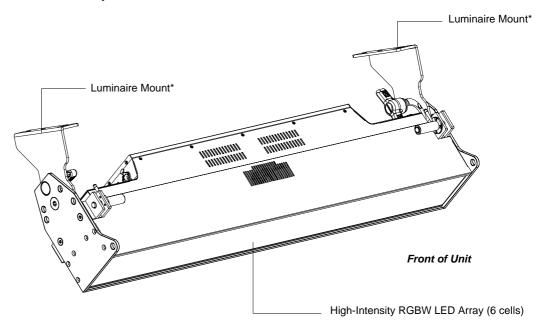
Part Number	Description
SLBAR520YP	Yoke Plate, Black
MC	Mega Claw, Black, Anodized
SC	Molded Yoke C-Clamp
HC	Light Weight Half Coupler
82003	Safety Cable
SLPIN1	Luminaire Connecting Pin (North American Models Only)



SL BAR 520 RGBW LED LUMINAIRE OVERVIEW

1. SL BAR 520 RGBW LED Luminaire Components

Major Luminaire Components



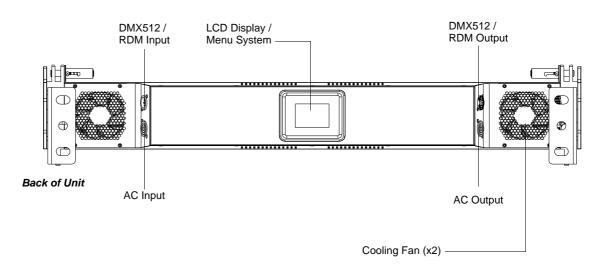


Figure 2: SL BAR 520 RGBW LED Luminaire Components

Note: *Mounts can be removed and reversed. See "Mounting Luminaire" on page 10 for more information



LCD Display / Menu System

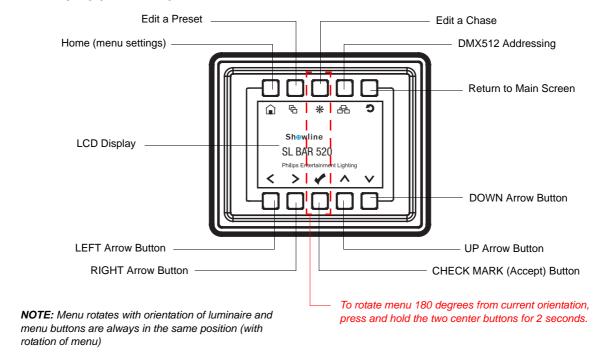


Figure 3: LCD Display & Menu System

Note: For Menu operation and programming details, refer to "LCD Display and Menu System" on page 16.

INSTALLATION AND SET UP

1. Power Requirements

The SL BAR 520 RGBW LED Luminaire operates on AC input voltages from 100 to 240 VAC.



WARNING! This unit does not contain an ON/OFF switch. Always disconnect power input cable to completely remove power from unit when not in use.

AC Power Operation

When connected to an AC source, the unit operates on 100 to 240 volts AC (+/- 10%, auto-ranging). The luminaire contains an auto-ranging power supply. Each luminaire can draw up to 300 Watts.



WARNING! Maximum amount of units that may be daisy-chained is (A) 6 units at 100VAC (20 Amps) or (B) 16 units 230 ~ 240VAC (20 Amps). Refer to Table 1 for detailed information at various voltages.

Note: For wiring of AC input connector, refer to "Connecting SL BAR 520 RGBW LED Luminaires to AC Power" on page 8.

Table 1: SL BAR 520 RGBW LED Luminaire Voltage vs. Current

Voltage (AC)	Total Current (A)	Maximum number of units that can be linked together*
100	3.00	6
110	2.72	7
120	2.50	8
130	2.31	8
140	2.14	9
150	2.00	10
160	1.88	10
170	1.76	11

Voltage (AC)	Total Current (A)	Maximum number of units that can be linked together*
180	1.67	11
190	1.58	12
200	1.50	13
210	1.43	13
220	1.36	14
230	1.30	15
240	1.25	16
· ·		



WARNING! *These figures are based on the Maximum Allowable Input Current of 20 Amps (and the maximum power supply limit of 300 Watts). *Do not overload circuits!*



IMPORTANT AC POWER CONNECTION NOTES:

- a. When using the daisy-chain connection method, ONLY connect SL BAR 520 RGBW LED Luminaires to AC Output Connection of SL BAR 520 RGBW LED Luminaires. DO NOT CONNECT OTHER TYPES OF LUMINAIRES OR DEVICES!
- b. Use only use approved cable types.
- c. Do not overload circuits!
- d. Do not connect SL BAR 520 RGBW LED Luminaires to dimmed circuits.
- e. The MAXIMUM allowable number of SL BAR 520 RGBW LED Luminaires which can be 'daisy-chained' on one power feed are listed in Table 1, above. *DO NOT EXCEED!*



2. Connecting Power

Units can be powered in one of two ways:

- Direct connection to a AC power source using an AC input cable. For wiring of AC input connector, refer to "Connecting SL BAR 520 RGBW LED Luminaires to AC Power" below.
- Connection from the AC output of another SL BAR 520 RGBW LED Luminaire. When using this method, it is very important not to connect any other type of equipment device.



WARNING! Only connect other SL BAR 520 RGBW LED Luminaires to the AC Output (Thru) connector of a SL BAR 520 RGBW LED Luminaire.

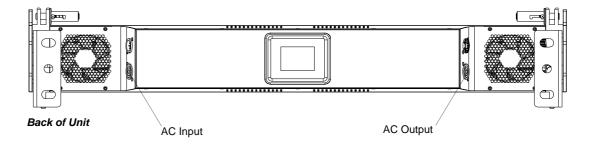
Connecting SL BAR 520 RGBW LED Luminaires to AC Power

If the unit is supplied with an AC input cable without an input connector installed. The input connector is a user-supplied accessory.

Table 2 on page 8 describes how to connect power to your SL BAR 520 RGBW LED Luminaire. Field wiring of the SL BAR 520 RGBW LED Luminaire is straight forward. The following wiring scheme is used:

Table 2: SL BAR 520 RGBW LED Luminaire (IP20 Rated Models) AC Input Connections

Wire Color	Purpose
Brown	Main / Line (100 to 240VAC)
Blue	Neutral
Green/Yellow	Ground (Earth)



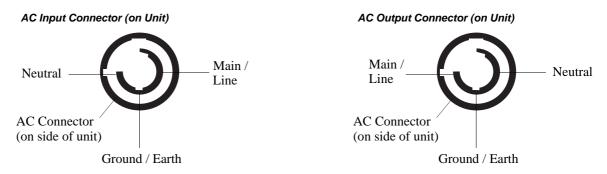


Figure 4: SL BAR 520 RGBW LED Luminaire AC Input & Output Connections

CAUTION: In the event the AC input cable of this luminaire is damaged, it must be replaced, by the user, with an approved cable through an Authorized Showline Dealer or Service Center.

3. Connecting to the DMX512 Network

Basic DMX512 installation consists of connecting multiple SL BAR 520 RGBW LED Luminaires together (up to 32 luminaires) in "daisy-chain" fashion. A cable runs from the control console (or DMX512 control source) to the DMX connector on the first SL BAR 520 RGBW LED Luminaire. Another cable runs from the other DMX connector on the first unit to a DMX connector on the next SL BAR 520 RGBW LED Luminaire (or DMX512 device to be controlled).

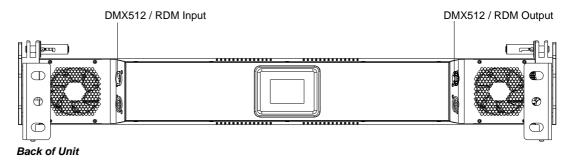
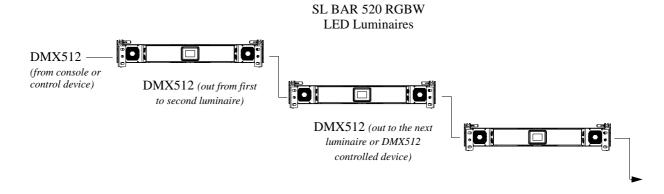


Figure 5: SL BAR 520 RGBW LED Luminaire DMX512 Input / Output Connections

Note: For more information on DMX512 networking and systems, refer to "Additional Resources for DMX512" on page 1. For SL BAR 520 RGBW LED Luminaire DMX Mapping, refer to "DMX CONTROL" on page 27.



DMX512 Signa	I XLR Pin
Common (Drain	i) 1
DMX512 -	2
DMX512 +	3

Figure 6: SL BAR 520 RGBW LED Luminaire - DMX512 Connections



4. Mounting Luminaire

The SL BAR 520 RGBW LED Luminaire is provided with two mounts and safety cable anchor points.

The two mounts are easily removed and reversed as required. These mounts are designed to accept a variety of mounting hooks, clamps, etc. for hanging applications or can be set on the mounts for floor applications. Refer to **Figure 7** for additional information. *Note, the bottom of the luminaire must be free and clear of any objects (i.e., scenery) to allow for proper airflow.*

Simply attach hook, clamp, etc. to the SL BAR 520 RGBW LED Luminaire mount assembly in the M13 hole.

Note: Mounting hooks, clamps, etc. are sold separately or by others. For available mounting accessories refer to "Accessories" on page 4.

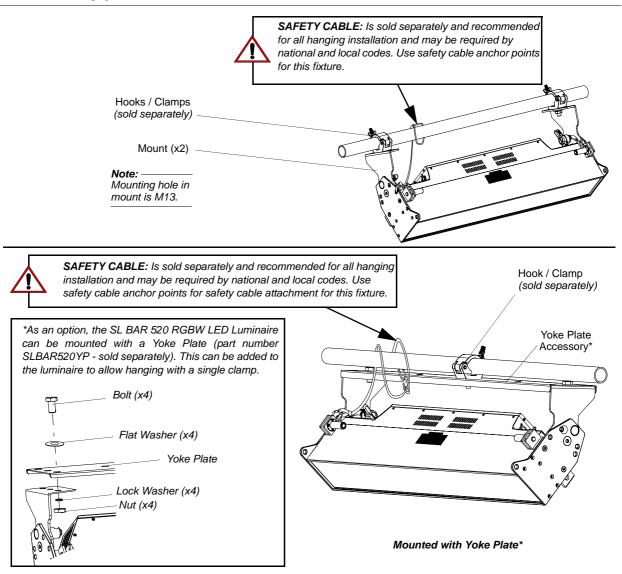


Figure 7: Mounting Luminaire - Hanging Applications

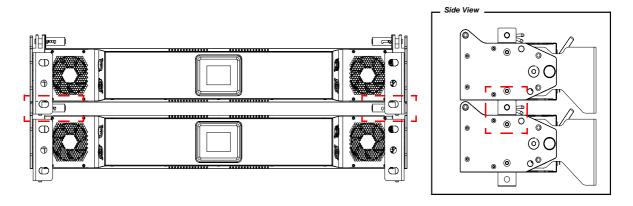
5. Connecting & Mounting Multiple Luminaires

SL BAR 520 RGBW LED Luminaires include a built-in Quick Connect system that allows the luminaires to be physically connected together while retaining perfect pixel pitch. Units may be connected in top-to-bottom or side-by-side to allow for a wide range of configurations. In addition, they may be connected together with the SL NITRO 510 LED STROBE luminaire.



Connecting Luminaires Top-to-Bottom

Each SL BAR 520 RGBW LED Luminaire includes two built-in Quick Connect slot and pin systems as illustrated in **Figure 8**. This allows a quick connection of units when stacked on top of each other. Up to ten SL BAR 520 RGBW LED Luminaires may be supported when connected using the Quick Connect system.



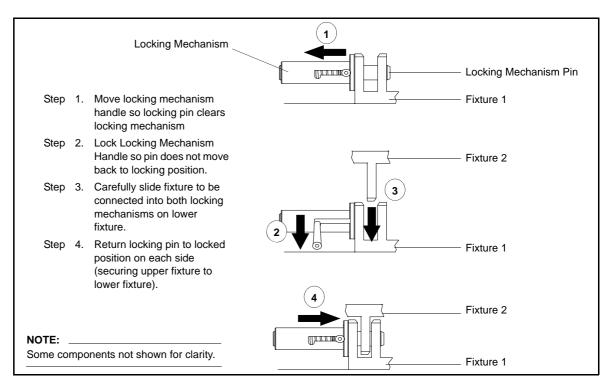


Figure 8: Connecting Luminaires Top-to-Bottom

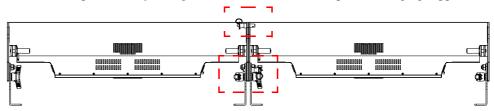


WARNING! Your structure must be capable of properly supporting the weight of multiple connected fixtures. Each fixture must use an approved safety cable attached to a fixed object. Up to ten SL BAR 520 RGBW LED Luminaires may be supported when connected using the Quick Connect system. When connecting units together, ensure all Quick-Connect pins are in the "engaged" position.



Connecting Luminaires Side-to-Side

Each SL BAR 520 RGBW LED Luminaire ships with three Luminaire Connecting Pins as indicated in **Figure 9**. All three pins are used to connect two luminaires together linearly. Each fixture must be mounted using its own mounting hardware. The side-to-side pins are only to align the luminaires and do not provide hanging support.



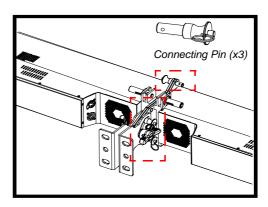


Figure 9: Connecting Luminaires Side-to-Side



WARNING! Each fixture must use an approved safety cable attached to a fixed object.

6. Mounting SL BAR 520 RGBW LED Luminaire with Other Luminaires

The SL BAR 520 RGBW LED Luminaire and SL NITRO 510 LED STROBE Luminaire are designed to be connected together top-to-bottom and/or end-to-end using the same connecting hardware. The pixels of the SL NITRO 510 LED STROBE Luminaire and the zones of the SL BAR 520 RGBW LED Luminaire will be perfectly aligned when connected via the built-in connecting hardware.

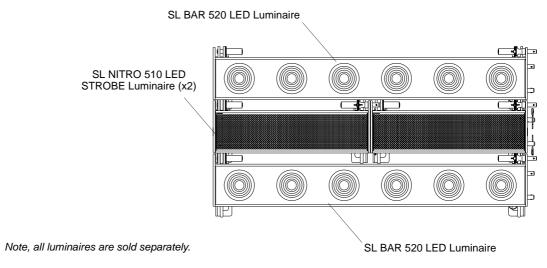


Figure 10: Combining SL BAR 520 and SL NITRO 510 luminaires



Connecting Combined Luminaires Top-to-Bottom

When combining units connected top-to-bottom, two SL BAR 520 RGBW LED Luminaires are first connected end-to-end and then connected top-to-bottom with a single SL BAR 520 luminaire.

Connecting Notes:



WARNING! Do not exceed ten rows of combined luminaires connected together top-to-bottom with a single hanging point. If more than ten rows are required, each ten rows must use its own connection to a fixed object.

• The two SL NITRO 510 units must have all three side-to-side pins installed (refer to **Figure 11** and "Connecting Luminaires Side-to-Side" on page 12).

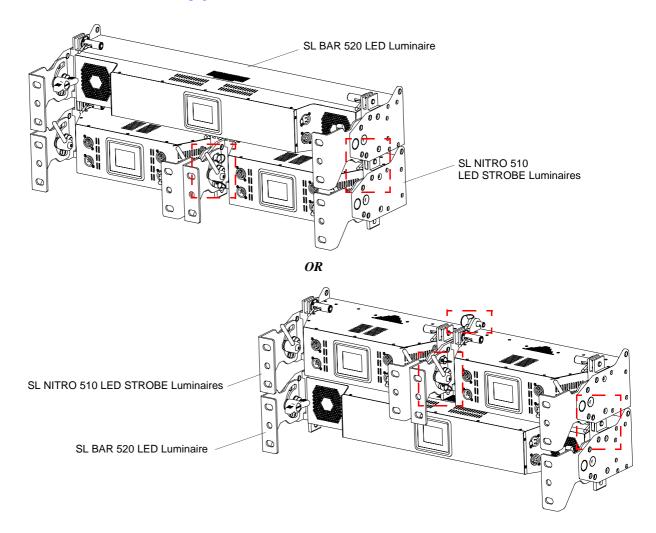
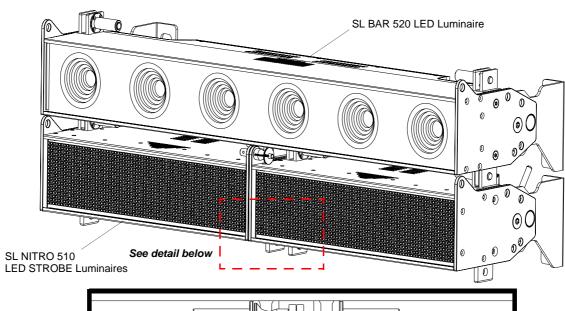


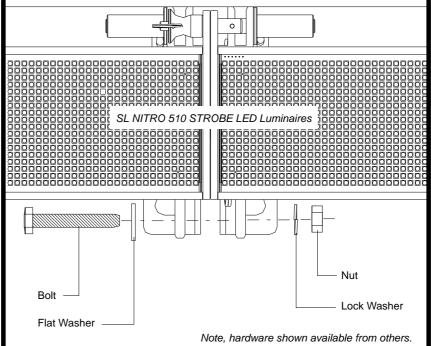
Figure 11: SL BAR 520 RGBW LED Luminaires - Connections

- When two SL NITRO 510 LED STROBE Luminaires are combined with a SL BAR 520, there is no top-to-bottom connection available in the center.
- When a SL BAR 520 unit is mounted below the two SL NITRO 510 LED STROBE Luminaires, the top-to-bottom connections will rest on the center of the SL BAR 520, preventing the units from spreading apart in the center.
- If the bottom of a configuration has two SL NITRO 510 LED STROBE Luminaires below a single SL BAR 520, connect the bottom center top-to-bottom connections with the following hardware (available from others) to pre-



vent the spacing between the two SL NITRO 510 LED STROBE Luminaires from spreading apart at the center. Obtain and install:





- 1) One M10-1.5 x 25 mm Long, Hex Head Cap Bolt
- 2) One 10 mm Flat Washer
- 3) One 10 mm Split-Lock Washer
- 4) One M10-1.5 (8 mm high) Hex Nut
- Installation is Flat Washer under Bolt Head, Bolt through both SL BAR 520 RGBW LED Luminaire brackets, Lock Washer, and then Hex Nut. Hand tighten.



WARNING! Your structure must be capable of properly supporting the weight of multiple connected fixtures. Each fixture must use an approved safety cable attached to a fixed object. Up to ten luminaire rows may be supported when connected using the Quick Connect system.



Connecting Combined Luminaires Side-to-Side

When combining units connected side-to-side, all units connect using the same pin system and any combination can be created (refer to installation instructions and warnings contained in "Connecting Luminaires Side-to-Side" on page 12).

- Each SL NITRO 510 LED STROBE Luminaire and SL BAR 520 RGBW Luminaire ships with three Luminaire Connecting Pins as indicated in **Figure 9**.
- The three side-to-side pins must be installed per luminaire.
- All three pins are used to connect luminaires together linearly. Each fixture must be mounted using its own mounting hardware. The side-to-side pins are only to align the luminaires and do not provide hanging support.
- Figure 12 shows an example of connecting luminaires side-by-side.

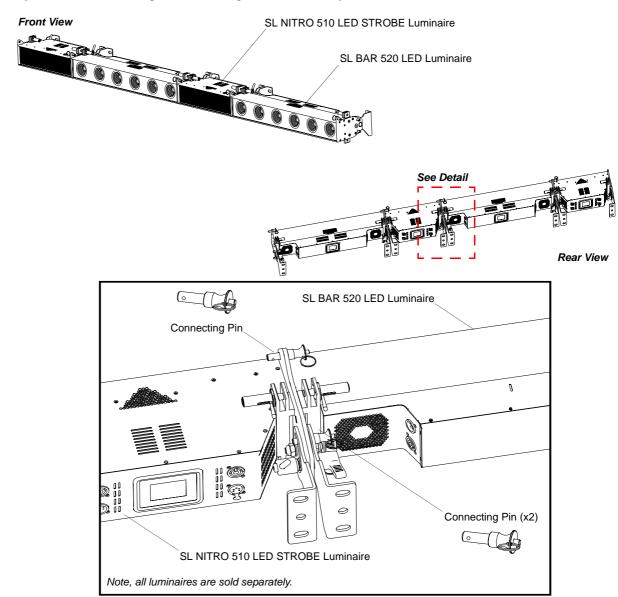


Figure 12: Connecting Combined Luminaires Side-to-Side Example



WARNING! Each fixture must use an approved safety cable attached to a fixed object.



OPERATION AND PROGRAMMING

1. LCD Display and Menu System

The SL BAR 520 RGBW LED Luminaire's LCD Display and Menu System provides local control for accessing the following fixture's settings:

- Presets (Standard and User Defined)
- · Color Filters
- Effects (Chases preloaded and user defined)
- Strobe / Timing
- Fixture Settings
- Fixture Lockout (to prevent changes)
- · Password Setting
- Current Fixture Operational Status
- Setting the DMX512 Address

Note: If there are multiple luminaires in a system, changes would need to be made at each LCD Menu as desired. For SL BAR 520 RGBW LED Luminaire menu structure, see "SL BAR 520 RGBW LED Luminaire Main Menu Options" on page 17.

Upon power up, the LCD will display the main screen showing the product type/name. If DMX is enabled, the programmed address will appear after power up.

2. LCD Display and Menu System Operation

The LCD Display Menu system consists of several categories. Use the Menu Buttons to access and make changes to the menu items. When the desired menu item is reached, press the desired Menu Button to display the menu options and to navigate and configure the menu options as required.

To navigate and access menu settings/selections:

- Step 1. Make sure unit is powered and turned on.
- Step 2. Press the desired button (as shown in Figure 13 on page 17) to access menu categories.
- Step 3. Use UP | DOWN | LEFT | RIGHT arrow buttons to navigate through the various options and settings.
- Step 4. Make changes as desired.
- Step 5. Press CHECK MARK (OK) button to accept changes.



Edit a Preset Edit a Chase Home (menu settings) DMX512 Addressing Return to Main Screen / Return Up One Level Showline LCD Display SL BAR 520 **RIGHT Arrow Button LEFT Arrow Button DOWN Arrow Button** UP Arrow Button -OK (Check Mark) Button To rotate menu 180 degrees manually from current NOTE: Menu rotates with orientation of Luminaire and orientation, press and hold the two center buttons for 2 menu buttons are always in the same position (with seconds. rotation of menu)

Figure 13: LCD Display and Menu System

3. SL BAR 520 RGBW LED Luminaire Main Menu Options

Presets

Presets are stored values of the luminaire's LED settings that can be recalled via the menu system or DMX. You can customize up to 31 presets via the menu system.

Recalling or Editing Presets

To recall or edit a preset:

- Step 1. Select Preset from the main menu or from the Preset shortcut key.
- Step 2. The top left field indicates the current preset or Off, when this field is selected (highlighted in blue), use the left and right buttons to scroll through all presets
- Step 3. If you wish to edit the preset, use the Up and Down keys to scroll through the parameters. Once a parameter is selected, use the left and right arrow buttons to make adjustments.

Edit a Preset

Notes:

- If security features are enabled, the Up and Down arrows will have no effect. See "Settings/Security" on page 20.
- Depending on the DMX map set assigned the DMX menu, different either RGBW or HSIC parameters will be available.
- Step 4. Once all values are adjusted as desired, press the Check Mark button to save the preset.
- Step 5. The Save Preset Menu option will appear. Use the left and right arrow buttons to select the preset number to save to.

Note: This function allows you to save your current edits to a different preset number than you began editing. This is helpful to create copies of existing presets.



- Step 6. Press the Check Mark button to save the preset. You will be asked to confirm your saving operation.
- Step 7. The preset is now saved and can be recalled via the menu or DMX.

Color Filter

Color filters are 43 factory made colors that utilize the Harmonize Color Calibration system (refer to "Harmonize Color Calibration" on page 24 for more information). They can be recalled via the menu system or DMX.

To recall a color filter from the menu:

- Step 1. Select Color Filter from the main menu
- Step 2. The top indicates the current color filter or Off, when this field is selected (highlighted in blue), use the left and right buttons to scroll through all color filters.
- Step 3. Use the Up and Down arrow keys to toggle to the Master Intensity field. Use the Left and Right arrow keys to adjust the Master Intensity.
- Step 4. The menu will display a graphical indication of the color along with the color name.

Note: The color filter will remain ON until you select a preset, chase, other color filter or send the unit DMX.

Effects

Effects are chases stored values of the luminaire's LED settings that can be recalled via the menu system or DMX. There are 10 factory defined chases and eight user adjustable chases. You can adjust the master intensity, speed, and fade values for any of the 18 chases.

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the different general fixture settings. When finished, press the Check button to exit the menu level. The adjustable parameters are described in Table 3.

Table 3: Effects Parameters

Parameter	Description
User Chase / Built-in Chase	Select from the 18 different chases.
Master Intensity	Adjust the master intensity for ALL chases.
Total Steps	Displays the total steps used by the chase. This field is not editable.
Speed	The total time each step of the chase will be recalled.
Fade	The percentage of the time assigned by the speed that is crossfaded between steps.

Editing User Chases

Eight User chases can be further customized to create different effects on the fixture. To edit a User Chase, first use the up and down arrows to scroll to the Edit User Chase field and then press the Check Mark button. The Edit User Chase window will be displayed:

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the different general fixture settings. When finished, press the Check button to exit the menu level. The adjustable parameters are described in Table 4.

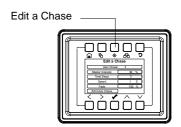


Table 4: Chase Parameters

Parameter	Description
User Chase	Select which chase you wish to edit.
Total Steps	Displays the total steps used by the chase. This field is not editable.
Edit Step	Select a step to edit with the left right arrow buttons. Press the Check Mark button to edit the step. (see To edit and save a Step:)
New Step	Add a step to the end of the chase. Press the Check Mark button to edit the new step. (see To edit and save a Step:)
Delete Step	Delete the currently selected step in the Edit Step field. Press the Check Mark button to delete the current step.
Rainbow	Press the Check Mark button to display the Rainbow Chase editor.



To edit and save a Step:

- Step 1. Select Edit Step or New Step from the Edit User Chase menu.
- Step 2. The top left field indicates the preset or color filter to be used for the step. When set to OFF no preset or color filter is to be used. Use the left and right buttons to scroll through all presets and color filters.
- Step 3. Use the Up and Down keys to scroll through the output parameters. Once a parameter is selected, use the left and right arrow buttons to make adjustments.

Notes:

- If security features are enabled, the Up and Down arrows will have no effect. See "Settings/Security" on page 20.
- Fixtures with multiple pixel control include a parameter titled "Pixel" that allows you to independently adjust the output of each individual pixel or the entire fixture.
- Depending on the DMX map set assigned the DMX menu, different either RGBW or HSIC parameters will be available.
- Step 4. Once all values are adjusted as desired, press the Check Mark button to return to the Edit User Chase screen.



- Step 5. Continue editing steps as needed. When complete, press the Return to Main Menu button or up one level (as shown to the right). to exit the Edit User Chase window.
- Step 6. The user chase is now saved and can be recalled via the menu or DMX.

Edit Rainbow

An additional option in the Edit User Chase options is to have the fixture generate a multi-colored chase using different pixels from the fixture. When you select Rainbow from the Edit Step window the Edit Rainbow window will display the following options.

Table 5: Rainbow Parameters

Parameter	Description
Direction	Select either right or left to define the direction the rainbow effect runs.
Number of Color	Select the number of colors used in the rainbow effect.
Current Color	Will display the values of the current color selected. Press the Check Mark button to edit the selected color.
Delete Step	Delete the currently selected step in the Edit Step field. Press the Check Mark button to delete the current step.

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the settings. When finished, press the Check button to exit the menu level.

The bottom of the Edit Rainbow window displays a graphical representation of the current rainbow effect.



When finished editing the Rainbow, press the Main Menu button (as shown to the right). You will be asked to confirm that you wish to save the rainbow. Select Yes to save and return to the Edit a Chase window.

Strobe/Timing

The Strobe/Timing menu allows you to assign strobe and timing values from the menu system. These settings are instantly applied to any active Preset, Color filter, or chase.

Use the Up and Down buttons to select parameters and the Left and Right buttons to adjust the currently selected parameter. The adjustable parameters are described in Table 6 on page 20.



Table 6: Strobe / Timing Parameters

Parameter	Description
Master Intensity	Overall fixture output intensity level.
Strobe: X	Strobe mode and rate value settings following DMX map (see DMX CONTROL for details).
Duration	The time each strobe flash remains ON.
Intensity Timing	The time used to change intensity values when running a chase.
Color Timing	The time used to change color values when running a chase.

Settings/Security

All Showline fixtures have a multiple level locking feature. This allows you to configure the fixture and allow different menu access to multiple users. The menu system can be locked instantly or assigned to power on to a particular lock level. You can assign three different 4-digit PIN (personal identification number) codes to each unlock specific levels of functionality within the menu system.

Anytime the fixture is locked, each PIN code will unlock all functions except the pertaining features assigned via the security level.

Note: The Level 3 PIN will always unlock all functions.

Table 7: Security Lock Levels

Lock Level	Menu Functions Affected
Level 1	Edit Presets, Edit Chases, and Settings Menu
Level 2	Settings Menu
Level 3	All

Use the Up and Down buttons to select security PIN codes. Press the Check button and then use Left and Right and Up Down buttons to assign the pin code. Press the Check button to save the new PIN code.

The Power-Up Level parameter assigns a lock level to the fixture when power is applied. Use the Up and Down buttons to select the Power-Up Level, and then use the Left and Right buttons to select the Power-up Level option.

Table 8: PIN Level Parameters

Parameter	Description			
Enter Pass PIN	Enter a PIN code matching the level codes assigned in the Settings/Security menu to toggle the current security level.			
Level 1 PIN	Edit the PIN code used to toggle the Level 1 security.			
Level 2 PIN	Edit the PIN code used to toggle the Level 2 security.			
Level 3 PIN	Edit the PIN code used to toggle the Level 3 security.			
	Select the security level to default to when the fixture is powered ON.			
Power-up Level	Disable PIN will disable all security functions.			
	Locked will lock all functions.			



Settings/General

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the different general fixture settings. When finished, press the Check button to exit the menu level. The adjustable parameters are described in Table 9.

Table 9: General Level Parameters

Parameter	Description			
Power-Up	Select the action of the fixture when the unit is powered ON. You can select from Off, Last Set, Color filters, presets, and chases.			
Mode	Select either Master/Slave (see Master / Slave Operational Mode for more information).			
	Select Normal, Incandescent, or Reduced dimming response.			
	Normal: Fixture LEDs dim with a normal response.			
Dim Response	 Incandescent: Fixture LED's dim with an incandescent emulation response. The response to dimming commands will be slightly delayed at lower intensities. 			
	 Reduced: The response to dimming commands will be calculated with a smaller algo- rithm to provide emulation with other manufacturer's products. 			
Dimming Curve	Select one of four dimming curve choices (see Dimming Curve Selection for more information).			
Calibration	Toggle Harmonize Color Calibration on or off (see Harmonize Color Calibration for more information).			
Fan Control	Select Auto of Off fan operation (see DMX CONTROL for more information).			

Settings/Factory Default

Factory default menu settings can be recalled through this menu option. You can select if you wish to overwrite the user edited preset and chases.

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the different settings. When finished, press the Check button to exit the menu level. The adjustable parameters are described in Table 10.

Table 10: Factory Default Parameters

Parameter	Description				
	No - all menu items are able to be restored to factory defaults.				
Protected	Preset & Chase - user edited Presets and Chases are not able to be restored to factory defaults.				
Load Footony	No - no action.				
Load Factory	Yes - restore to factory default menu settings.				

Settings/DMX

DMX configuration options are available in the DMX menu.

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the fixture's DMX settings. When finished, press the Check button to exit the menu level. The adjustable parameters are described in Table 11.

Table 11: DMX Setting Parameters

Parameter	Description
DMV Fbl-	Enable - Fixture will respond to DMX commands/signals.
DMX Enable	Disable - Fixture will ignore DMX commands/signals.
Address	Assigns the fixture's DMX start address.
Мар	Selects the DMX map for the fixture to use (see DMX CONTROL section for more information).
	Selects the action of the fixture when the unit is powered ON and not receiving DMX.
	Off - Turn off all LED output.
When no DMX	Last Action - restore the last menu action.
	Power-up - follow the power-up value in the settings menu.
	Hold - continue with the last DMX values received.
LED Group	Select the number of LED groups to control via DMX (see DMX CONTROL section for more information)



Settings/DMX Control Channel

DMX configuration options are available in the DMX Control Channel menu.

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the fixture's DMX settings. When finished, press the Check button to exit the menu level. The adjustable parameters are described in Table 12.

Table 12: DMX Setting Parameters

Parameter	Description
Dim Response Normal	Fixture LEDs dim with a normal response.
Dim Response Incandescent	Fixture LED's dim with an incandescent emulation response. The response to dimming commands will be slightly delayed at lower intensities.
Dimming Curve Linear	Applies a linear control of the output of the fixture based on the DMX values on the Intensity Control Channels. See Dimming Curve Selection for more details.
Dimming Curve Square	Applies a square law control of the output of the fixture based on the DMX values on the Intensity Control Channels. See Dimming Curve Selection for more details.
Dimming Curve S-Curve	Applies an S-Curve control of the output of the fixture based on the DMX values on the Intensity Control Channels. See Dimming Curve Selection for more details.
Dimming Curve PL-Curve	Applies a dimming curve that follows the Philips Selecon PL series LED Luminaires control of the output of the fixture based on the DMX values on the Intensity Control Channels. See Dimming Curve Selection for more details.
Calibration OFF	Toggle Harmonize Color Calibration OFF (see Harmonize Color Calibration for more information).
Calibration ON	Toggle Harmonize Color Calibration ON (see Harmonize Color Calibration for more information).
Fan Auto	Fixture fans come on as needed and will still vary in speed, but will not exceed the factory set minimal noise limit.
Fan Off	Fixture fans will remain off in all circumstances and the fixture will automatically reduce LED output levels if LED temperatures rise above factory settings.

Settings / LED Group

Select the number of LED groups to control via DMX (see the individual modes contained in "DMX CONTROL" on page 27 for details).

Settings/Display

Options of the fixture's LCD display can be adjusted in the Display menu.

Use the Up and Down buttons to select parameters and the Left and Right buttons to assign the fixture's DMX settings. When finished, press the Check button to exit the menu level. The adjustable parameters are described in Table 13.

Table 13: LCD Display Parameters

Parameter Description			
	Yes - The display will be inverted.		
Flip Display	No - The display will not be inverted.		
	Auto - The display will automatically invert depending upon fixture orientation.		
Off Time	Assign a time for the display to automatically turn off after the last button press. A value of ON will leave the display on indifferently.		
Language Select	English is the only language currently supported.		

Lock Fixture

You can lock all fixture functions, requiring a PIN code to access the menu functions. When you select this menu item, you are asked to confirm that you wish to lock the fixture. Once locked, all menu items can only be accessed by entering one of the three PIN codes assigned in the Settings/Security menu. (see "Settings/Security" on page 20 for more information). The PIN code used to unlock the fixture will only unlock the functionality assigned to that particular PIN code.

Note: When the fixture is powered off, the Lock Fixture function will be disabled. To assign fixture power-up security refer to (see "Settings/Security" on page 20 for more information).



Password (PassPIN)

The Password menu item will display an Enter PassPIN dialog box. Use the Up Down Left Right buttons to enter a PIN code matching the codes assigned in the Settings/Security menu to toggle the current security level.

Status

The Status screen displays the current value of the master intensity and each LED of the luminaire. The number of pixels will vary depending upon fixture type. Use the Up Down Left Right arrows to scroll through the different LEDs and view their levels.

- The last Status item displayed shows the RDM UID and current Firmware Version.
- Press the Check Mark button to exit the Status screen.

Quick Selection Buttons

The Showline menu system includes four quick selection buttons on the top of the menu. These keys provide direct access to common functions and act as shortcuts to main menu items as described in Table 13.

 Quick Select Button
 Description

 Main Menu
 Refer to Settings/General for more information.

 Edit a Preset
 Refer to Recalling or Editing Presets for more information.

 Effects / Edit a Chase
 Refer to Effects and Editing User Chases for more information.

 DMX Start Address
 Refer to DMX Address for more information.

 Return to Main Menu / Return Up a Menu Item

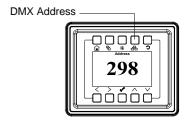
Table 14: Quick Select Buttons

DMX Address

You can display and edit the current DMX start address for the fixture by pressing the Quick Select button on the top of the menu system (as shown right). The current DMX start address will be display in large digits.

To edit the DMX start address:

- Step 1. Press the Check Mark button to begin the DMX start address editing. The last digit will change to a blue color.
- Step 2. Use the UP and Down arrows to change the value of the currently selected digit.
- Step 3. Use the Left and Right arrows to select another digit to adjust.
- Step 4. Press the Check Mark button to save the new DMX Start Address.



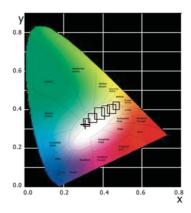


4. Harmonize Color Calibration

Harmonize is a proprietary, advanced LED color matching system, consisting of 3 correction modules: RGB, RGBW and Cool White/Warm White. Every Showline fixture undergoes rigorous testing to provide you with consistent control of color and intensity as well as output of the highest quality.

When enabled either via DMX or the fixture's menu, the Harmonize technology will ensure that colors match from fixture-to-fixture and pixel-to-pixel. As the Harmonize system matches Showline products, they will all operate in the same color space. Use the Harmonize system when perfect color matching is an essential requirement.

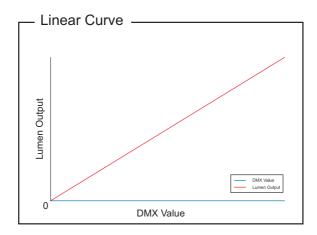
Note: When attempting to achieve the most saturated colors possible, disable the Harmonize color calibration.

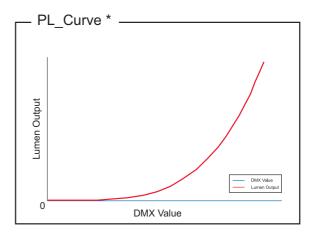


5. Dimming Curve Selection

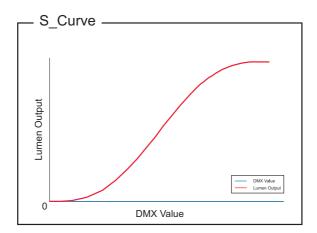
Through the menu, you are able to select one of four dimming curves:

- Linear Curve
- PL_Curve
- S_Curve
- Square Curve





*PL Curve follows the dimming curve of Philips Selecon PL series LED luminaries.



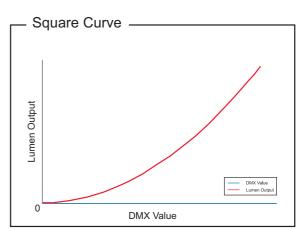


Figure 14: SL BAR 520 RGBW LED Luminaire Dimmer Curves

6. Master / Slave Operational Mode

The Master / Slave Operational Mode allows one SL BAR 520 RGBW LED Luminaire to act as the "Master" unit and all other connected units are controlled by this unit. When a unit is set to "Slave" mode, it will only listen to and follow any commands sent from a "Master" unit. Only one "Master" unit is allowed in this type of operation.

To setup a master / slave network:

- Step 1. Set the first device in the DMX512 chain to Master Mode through the unit's menu system.
- Step 2. Set all other connected units to Slave Mode.
- Step 3. The master unit can be controlled via DMX512, RDM or through standalone operation (self-contained network utilizing on-board effects). The slave units will mimic the master unit's operation in all cases.

Note: For more information on DMX512 networking and systems, refer to "Additional Resources for DMX512" on page 1. For SL BAR 520 RGBW LED Luminaire DMX Mapping, refer to "DMX CONTROL" on page 27.

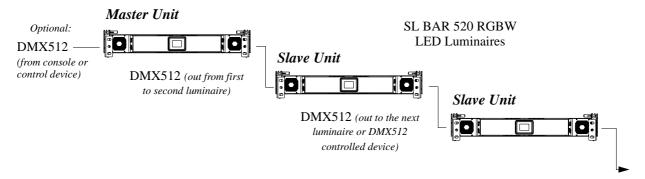


Figure 15: SL BAR 520 RGBW LED Luminaire - Master / Slave Configuration

DMX CONTROL

This section contains information for operating the luminaire using DMX control in 16-bit, RGBW 8-Bit, Simple RGBW 8-bit, or HSIC (Hue, Saturation, Intensity and Color Correction) modes. For Menu options and detailed information, see "LCD Display and Menu System" on page 16.

Note: These tables assume a DMX start address of 1. When a different starting address is used, this address becomes channel 1 function and other functions follow in sequence.

1. 16-Bit Mode

Table 15 provides DMX channel mapping of all DMX512 control values when the SL BAR 520 RGBW LED Luminaire is in 16-bit DMX512 mode (as set by the luminaire's menu system).

Table 15: SL BAR 520 RGBW LED Luminaire DMX Channel Mapping (16-Bit Mode)

DMX Channel	Parameter	Range DMX	Range%	Default - recom- mended console default values	Description
1	Master Intensity - High	0 - 65535	0 - 100%	0	46 hit control for Intensity of LED cottings
2	Master Intensity - Low	0 - 00000	0 - 100%	0	16-bit control for Intensity of LED settings.
3	Color Presets	0 - 255	0 - 100%	0	Select presets, variable color filters or chases as follows: Channel OFF (disabled) DMX 0 - 4 Preset 0 (OFF) DMX 5 - 6 Preset 1 DMX 7 - 8 Preset 2 DMX 9 - 10 Preset 3 DMX 11 - 12 Preset 4 DMX 13 - 14 Preset 5 DMX 15 - 16 Preset 6 DMX 17 - 18 Preset 7 DMX 19 - 20 Preset 8 DMX 21 - 22 Preset 9 DMX 23 - 24 Preset 10 DMX 25 - 26 Preset 11 DMX 27 - 28 Preset 12 DMX 39 - 30 Preset 13 DMX 31 - 32 Preset 14 DMX 33 - 34 Preset 15 DMX 35 - 36 Preset 16 DMX 37 - 38 Preset 17 DMX 39 - 40 Preset 18 DMX 41 - 42 Preset 19 DMX 43 - 44 Preset 20 DMX 45 - 46 Preset 21 DMX 47 - 48 Preset 22 DMX 49 - 50 Preset 24 DMX 55 - 56 Preset 25 DMX 55 - 56 Preset 26 DMX 57 - 58 Preset 27 DMX 59 - 60 Preset 28 DMX 61 - 62 Preset 31 DMX 67 - 68 CF_0_Color OFF DMX 69 - 70 CF_1_White 10000K DMX 71 - 72 CF_2_White 8000K DMX 73 - 74 CF_3_White 6500K DMX 77 - 78 CF_5_White 5600K DMX 77 - 78 CF_5_White 5600K DMX 77 - 78 CF_6_White 5600K DMX 77 - 78 CF_5_White 4500K DMX 81 - 82 CF_7_White 4500K DMX 83 - 84 CF_8_White 3200K DMX 85 - 86 CF_9_White 3000K DMX 87 - 88 CF_10_White 2700K DMX 89 - 90 Continued next page



Table 15: SL BAR 520 RGBW LED Luminaire DMX Channel Mapping (16-Bit Mode)

					Continued from previous page
3	Color Presets	0 - 255	0 - 100%	0	CF_11_Moroccan Pink DMX 91 - 92 CF_12_Pink DMX 93 - 94 CF_13_Flesh Pink DMX 95 - 96 CF_14_Bright Rose DMX 97 - 98 CF_15_Follies Pink DMX 99 - 100 CF_16_Fuchsia Pink DMX 101 - 102 CF_17_Surprise Pink DMX 103 - 104 CF_18_Congo Blue DMX 105 - 106 CF_19_Blue DMX 107 - 108 CF_20_Virgin Blue DMX 109 - 110 CF_21_Midnight Maya DMX 111 - 112 CF_22_Double C.T Blue DMX 113 - 114 CF_23_Slate Blue DMX 117 - 118 CF_24_Regal Blue DMX 117 - 118 CF_25_Full C.T Blue DMX 119 - 120 CF_26_Steel Blue DMX 121 - 122 CF_27_Lighter Blue DMX 123 - 124 CF_28_Cyan DMX 125 - 126 CF_29_Marine Blue DMX 127 - 128 CF_30_Soft Green DMX 129 - 130 CF_31_Moss Green DMX 133 - 134 CF_32_Green DMX 133 - 134 CF_33_Fem Green DMX 137 - 138 CF_35_Pale Green DMX 137 - 138 CF_36_Spring Yellow DMX 141 - 142 CF_37_Yellow DMX 143 - 144 CF_38_Deep Amber DMX 145 - 146 CF_39_Chrome Orange DMX 147 - 148 CF_40_Orange DMX 149 - 150 CF_41_Magenta DMX 155 - 156 Rotate CW Fast -> Slow DMX 157 - 171 Rotate ACW Slow -> Fast DMX 177 - 178 Random Color Fast -> Slow DMX 187 - 201 Chase1 DMX 202 - 204 Chase2 DMX 205 - 207 Chase3 DMX 208 - 210 Chase4 DMX 211 - 213 Chase6 DMX 217 - 219 Chase7 DMX 220 - 222 Chase8 DMX 220 - 222 Chase8 DMX 223 - 234 User Chase7 DMX 235 - 237 User Chase6 DMX 247 - 249 User Chase7 DMX 250 - 252 User Chase8 DMX 250 - 252 User Chase8 DMX 250 - 252 User Chase8 DMX 255 - 255
4	Strobe	0 - 255	0 - 100%	0	Controls strobe operations as follows: Open = DMX 0 - 2 Closed = DMX 3 - 5 Slow Rand = DMX 6 - 7 Med Rand = DMX 8 - 10 Fast Rand = DMX 11 - 12 Strobe Range = DMX 13 - 127 (fastest) Pulse + Slow Rand = DMX 128 - 129 Pulse + Med Rand = DMX 130 - 131 Pulse + Fast Rand = DMX 132 - 133 Pulse + Range = DMX 134 - 191 Pulse - Slow Rand = DMX 194 - 195 Pulse - Med Rand = DMX 194 - 195 Pulse - Fast Rand = DMX 196 - 197 Pulse - Range = DMX 198 - 255
5	Duration	0 - 255	0 - 100%	0	Strobe Duration is 0 - 85 0 = DMX 0 1 = DMX 1 - 3 x = (DMX Value-1)/3+1 85 = DMX 253-255



Table 15: SL BAR 520 RGBW LED Luminaire DMX Channel Mapping (16-Bit Mode)

6	Intensity Timing	0 - 255	0 - 100%	255	Allows for timing control of intensity. Channel should default to 255 for smoothest actions using console and/or manual fades.
7	Color Timing	0 - 255	0 - 100%	255	Allows for timing control of colors. Channel should default to 255 for smoothest actions using console and/or manual fades.
8	8 Control		0 - 100%	0	Control Channel functions of the SL Series products. Set control channel value from 0 then turn to desired action. Hold value for at least 5 seconds, then turn to 0. Set control channel value to 0 without any scaling. Default Setting on Console = DMX 0-4 DIM Response _Normal = DMX 5 - 9 DIM Response _Incandescent = DMX 10 - 14 Dimming Curve _Linear = DMX 30 - 34 Dimming Curve _Square = DMX 35- 39 Dimming Curve _Square = DMX 40 - 44 Dimming Curve = DMX 45 - 49 Calibration_OFF = DMX 70 - 74 Calibration_ON = DMX 75 - 79 Fan_Auto = DMX 80 - 84 Fan_Off = DMX 85 - 89 Reserved (Future use) = DMX 90 - 250
9	Red 1-6, High Byte	0 05505	0. 4000/	0	40 bit
10	Red 1-6, Low Byte	0 - 65535	0 - 100%	0	16-bit control for of Red LEDs 0 to full.
11	Green 1-6, High Byte	0 - 65535	0 - 100%	0	16-bit control for of Green LEDs 0 to full.
12	Green 1-6, Low Byte	0 - 00000	0 - 100%	U	10-bit control for or Green LEDS 0 to full.
13	Blue 1-6, High Byte	0 - 65535	0 - 100%	0	16-bit control for of Blue LEDs 0 to full.
14	Blue 1-6, Low Byte	0 - 00000	0 - 100 /6	U	10-DIL CONTION OF BILLE LEDS 0 to full.
15	White 1-6, High Byte	0 - 65535	0 - 100%	0	16-bit control for of White LEDs 0 to full.
16	White 1-6, Low Byte	0 00000	0 10070	Ŭ	TO SIL CONTROL OF WHITE EEDS O TO IUII.



2. 16-Bit Group Modes

Table 16 provides DMX channel mapping of all DMX512 control values when the SL BAR 520 RGBW LED Luminaire is operated in various 16-bit DMX512 Group Control Modes.

Table 16: SL BAR 520 RGBW LED Luminaire DMX Channel Mapping (16-Bit Group Modes)

RGBW 16 BIT MODE						
DMX CHANNEL	6 Group MODE	3 Group MODE	2 Group MODE	1 Group MODE		
1	Master Intensity - High					
2	Master Intensity - Low					
3	Color Presets	Color Presets	Color Presets	Color Presets		
4	Strobe	Strobe	Strobe	Strobe		
5	Duration	Duration	Duration	Duration		
6	Intensity Timing	Intensity Timing	Intensity Timing	Intensity Timing		
7	Color Timing	Color Timing	Color Timing	Color Timing		
8	Control	Control	Control	Control		
9	Red_1 - High Byte	Red_1-2 - High Byte	Red_1-3 - High Byte	Red_1-6 - High Byte		
10	Red_1 - Low Byte	Red_1-2 - Low Byte	Red_1-3 - Low Byte	Red_1-6 - Low Byte		
11	Green_1 - High Byte	Green_1-2 - High Byte	Green_1-3 - High Byte	Green_1-6 - High Byte		
12	Green_1 - Low Byte	Green_1-2 - Low Byte	Green_1-3 - Low Byte	Green_1-6 - Low Byte		
13	Blue_1 - High Byte	Blue_1-2 - High Byte	Blue_1-3 - High Byte	Blue_1-6 - High Byte		
14	Blue_1 - Low Byte	Blue_1-2 - Low Byte	Blue_1-3 - Low Byte	Blue_1-6 - Low Byte		
15	White_1 - High Byte	White_1-2 - High Byte	White_1-3 - High Byte	White_1-6 - High Byte		
16	White_1 - Low Byte	White_1-2 - Low Byte	White_1-3 - Low Byte	White_1-6 - Low Byte		
17	Red_2 - High Byte	Red_3-4 - High Byte	Red_4-6 - High Byte			
18	Red_2 - Low Byte	Red_3-4 - Low Byte	Red_4-6 - Low Byte			
19	Green_2 - High Byte	Green_3-4 - High Byte	Green_4-6 - High Byte			
20	Green_2 - Low Byte	Green_3-4 - Low Byte	Green_4-6 - Low Byte			
21	Blue_2 - High Byte	Blue_3-4 - High Byte	Blue_4-6 - High Byte			
22	Blue_2 - Low Byte	Blue_3-4 - Low Byte	Blue_4-6 - Low Byte			
23	White_2 - High Byte	White_3-4 - High Byte	White_4-6 - High Byte			
24	White_2 - Low Byte	White_3-4 - Low Byte	White_4-6 - Low Byte			
25	Red_3 - High Byte	Red_5-6 - High Byte				
26	Red_3 - Low Byte	Red_5-6 - Low Byte				
27	Green_3 - High Byte	Green_5-6 - High Byte				
28	Green_3 - Low Byte	Green_5-6 - Low Byte				
29	Blue_3 - High Byte	Blue_5-6 - High Byte				
30	Blue_3 - Low Byte	Blue_5-6 - Low Byte				
31	White_3 - High Byte	White_5-6 - High Byte				
32	White_3 - Low Byte	White_5-6 - Low Byte				
33	Red_4 - High Byte					
34	Red_4 - Low Byte					
35	Green_4 - High Byte					
36	Green_4 - Low Byte					
37	Blue_4 - High Byte					
38	Blue_4 - Low Byte					
39	White_4 - High Byte					
40	White_4 - Low Byte					
41	Red_5 - High Byte					
42	Red_5 - Low Byte	Note: Refer t	o previous DMX man	ping information for Col		
43	Green_5 - High Byte			Timing, Color Timing, a		
44	Green_5 - Low Byte		_	Tilling, Color Tilling, a		
45	Blue_5 - High Byte	Control chann	iels.			
46	Blue_5 - Low Byte					
47	White_5 - High Byte					
48	White_5 - Low Byte					
49	Red_6 - High Byte					
50	Red_6 - Low Byte					
51	Green_6 - High Byte					
52	Green_6 - Low Byte					
53	Blue_6 - High Byte					
- 4	B. A. E.	1				



55

Blue_6 - Low Byte

White_6 - High Byte White_6 - Low Byte

3. RGBW 8-Bit Mode

Table 17 provides DMX channel mapping of all DMX512 control values when the SL BAR 520 RGBW LED Luminaire is in RGBW 8-bit DMX512 mode (as set by the luminaire's menu system).

Table 17: SL BAR 520 RGBW LED Luminaire DMX Channel Mapping (RGBW 8-Bit Mode)

DMX Channel	Parameter	Range DMX	Range%	Default - recom- mended console default values	Description
1	Master Intensity	0 - 255	0 - 100%	0	8-bit control for Intensity of LED settings.
2	Color Presets	0 - 255	0 - 100%	0	Select presets, variable color filters or chases as follows: Channel OFF (disabled) DMX 0 - 4 Preset 0 (OFF) DMX 5 - 6 Preset 1 DMX 7 - 8 Preset 2 DMX 9 - 10 Preset 3 DMX 11 - 12 Preset 4 DMX 13 - 14 Preset 6 DMX 17 - 18 Preset 7 DMX 19 - 20 Preset 8 DMX 21 - 22 Preset 9 DMX 23 - 24 Preset 10 DMX 25 - 26 Preset 11 DMX 27 - 28 Preset 12 DMX 23 - 30 Preset 13 DMX 31 - 32 Preset 14 DMX 33 - 34 Preset 15 DMX 35 - 36 Preset 16 DMX 37 - 38 Preset 17 DMX 39 - 40 Preset 18 DMX 41 - 42 Preset 19 DMX 43 - 44 Preset 20 DMX 45 - 46 Preset 21 DMX 47 - 48 Preset 22 DMX 49 - 50 Preset 23 DMX 51 - 52 Preset 24 DMX 53 - 54 Preset 25 DMX 55 - 56 Preset 26 DMX 57 - 58 Preset 27 DMX 67 - 68 CF_0_Color OFF DMX 69 - 70 CF_1_White 10000K DMX 71 - 72 CF_2_White 8000K DMX 73 - 74 CF_3_White 6500K DMX 77 - 78 CF_5_White 5600K DMX 77 - 78 CF_5_White 5600K DMX 77 - 78 CF_6_White 4500K DMX 78 - 80 CF_6_White 4500K DMX 83 - 84 CF_8_White 3200K DMX 83 - 84 CF_8_White 3200K DMX 83 - 84 CF_8_White 3200K DMX 83 - 84 CF_10_White 3000K DMX 83 - 84 CF_11_Moroccan Pink DMX 91 - 92 CF_11_Pink DMX 93 - 94 CF_13_Piesh Pink DMX 97 - 98 CF_11_Pink DMX 93 - 94 CF_13_Piesh Pink DMX 97 - 98 CF_11_Pink DMX 93 - 94 CF_13_Piesh Pink DMX 97 - 98 CF_11_Pink DMX 93 - 94 CF_13_Piesh Pink DMX 97 - 98 CF_11_Pink DMX 93 - 94 CF_13_Piesh Pink DMX 103 - 104 CF_22_Double C.T Blue DMX 113 - 114 CF_23_Slate Blue DMX 115 - 116 CF_24_Regal Blue DMX 117 - 118 CF_25_Fulli C.T Blue DMX 117 - 118
					Continued next page



Table 17: SL BAR 520 RGBW LED Luminaire DMX Channel Mapping (RGBW 8-Bit Mode)

					Continued from previous page CF_26_Steel Blue DMX 121 - 122 CF_27_Lighter Blue DMX 123 - 124 CF_28_Cyan DMX 125 - 126 CF_29_Marine Blue DMX 127 - 128 CF_30_Soft Green DMX 129 - 130 CF_31_Moss Green DMX 131 - 132 CF_32_Green DMX 133 - 134 CF_33_Fem Green DMX 135 - 136 CF_34_JAS Green DMX 137 - 138 CF_35_Pale Green DMX 139 - 140
2	Color Presets	0 - 255	0 - 100%	0	CF_36_Spring Yellow DMX 141 - 142 CF_37_Yellow DMX 143 - 144 CF_38_Deep Amber DMX 145 - 146 CF_39_Chrome Orange DMX 147 - 148 CF_40_Orange DMX 149 - 150 CF_41_Magenta DMX 151 - 152 CF_42_Flame Red DMX 153 - 154 CF_43_Purple DMX 155 - 156 Rotate CW Fast -> Slow DMX 157 - 171 Rotate ACW Slow -> Fast DMX 172 - 186 Random Color Fast -> Slow DMX 187 - 201
					Chase1 DMX 202 - 204 Chase2 DMX 205 - 207 Chase3 DMX 208 - 210 Chase4 DMX 211 - 213 Chase5 DMX 214 - 216 Chase6 DMX 217 - 219 Chase7 DMX 220 - 222 Chase8 DMX 223 - 225 Chase9 DMX 226 - 228 Chase10 DMX 229 - 231 User Chase1 DMX 232 - 234 User Chase2 DMX 235 - 237 User Chase4 DMX 238 - 240 User Chase4 DMX 241 - 243 User Chase5 DMX 244 - 246 User Chase6 DMX 247 - 249 User Chase7 DMX 250 - 252 User Chase8 DMX 253 - 255
3	Strobe	0 - 255	0 - 100%	0	Controls strobe operations as follows: Open = DMX 0 - 2 Closed = DMX 3 - 5 Slow Rand = DMX 6 - 7 Med Rand = DMX 8 - 10 Fast Rand = DMX 11 - 12 Strobe Range = DMX 13 - 127 (fastest) Pulse + Slow Rand = DMX 128 - 129 Pulse + Med Rand = DMX 130 - 131 Pulse + Fast Rand = DMX 132 - 133 Pulse + Range = DMX 134 - 191 Pulse - Slow Rand = DMX 194 - 195 Pulse - Med Rand = DMX 194 - 195 Pulse - Fast Rand = DMX 196 - 197 Pulse - Range = DMX 198 - 255
4	Duration	0 - 255	0 - 100%	0	Strobe Duration is 0 - 85 0 = DMX 0 1 = DMX 1 - 3 x = (DMX Value-1)/3+1 85 = DMX 253-255
5	Timing	0 - 255	0 - 100%	255	Allows for timing control of intensity and color. Channel should default to 255 for smoothest actions using console and/or manual fades.



Table 17: SL BAR 520 RGBW LED Luminaire DMX Channel Mapping (RGBW 8-Bit Mode)

6	Control	0 - 255	0 - 100%	0	Control Channel functions of the SL Series products. Set control channel value from 0 then turn to desired action. Hold value for at least 5 seconds, then turn to 0. Set control channel value to 0 without any scaling. Default Setting on Console = DMX 0-4 DIM Response _Normal = DMX 5 - 9 DIM Response _Incandescent = DMX 10 - 14 Dimming Curve_Linear = DMX 35 - 39 Dimming Curve_Square = DMX 45 - 39 Dimming Curve_S-Curve = DMX 40 - 44 Dimming Curve_PL-Curve = DMX 45 - 49 Calibration_OFF = DMX 70 - 74 Calibration_OFF = DMX 75 - 79 Fan_Auto = DMX 80 - 84 Fan_Off = DMX 85 - 89 Reserved (Future use) = DMX 90 - 250	
7	Red 1-6	0 - 255	0 - 100%	0	8-bit control of Red LEDs.	
8	Green 1-6	0 - 255	0 - 100%	0	8-bit control of Green LEDs.	
9	Blue 1-6	0 - 255	0 - 100%	0	8-bit control of Blue LEDs.	
10	White 1-6	0 - 255	0 - 100%	0	8-bit control of White LEDs.	



4. RGBW 8-Bit Group Modes

Table 16 provides DMX channel mapping of all DMX512 control values when the SL BAR 520 RGBW LED Luminaire is operated in various RGBW 8-bit DMX512 Group Control Modes.

Table 18: SL BAR 520 RGBW LED Luminaire DMX Channel Mapping (RGBW 8-Bit Group Modes)

RGBW 8 BIT MODE								
DMX CHANNEL	6 Group MODE	3 Group MODE	2 Group MODE	1 Group MODE				
1	Master Intensity	Master Intensity	Master Intensity	Master Intensity				
2	Color Presets	Color Presets	Color Presets	Color Presets				
3	Strobe	Strobe	Strobe	Strobe				
4	Duration	Duration	Duration	Duration				
5	Timing	Timing	Timing	Timing				
6	Control	Control	Control	Control				
7	Red_1	Red_1-2	Red_1-3	Red_1-6				
8	Green_1	Green_1-2	Green_1-3	Green_1-6				
9	Blue_1	Blue_1-2	Blue_1-3	Blue_1-6				
10	White_1	White_1-2	White_1-3	White_1-6				
11	Red_2	Red_3-4	Red_4-6					
12	Green_2	Green_3-4	Green_4-6					
13	Blue_2	Blue_3-4	Blue_4-6					
14	White_2	White_3-4	White_4-6					
15	Red_3	Red_5-6						
16	Green_3	Green_5-6						
17	Blue_3	Blue_5-6						
18	White_3	White_5-6						
19	Red_4							
20	Green_4							
21	Blue_4							
22	White_4							
23	Red_5							
24	Green_5							
25	Blue_5							
26	White_5	Note: Refer to previous DMX mapping information for Color						
27	Red_6		Presets, Strobe, Duration, Intensity Timing, Color Timing, and					
28	Green_6		g, co.o. 1 mmg, un					
29	Blue_6	Control channel	15.					
30	White 6							



5. Simple RGBW 8-Bit Mode

Table 17 provides DMX channel mapping of all DMX512 control values when the SL BAR 520 RGBW LED Luminaire is in Simple RGBW 8-bit DMX512 mode (as set by the luminaire's menu system).

Table 19: SL BAR 520 RGBW LED Luminaire DMX Channel Mapping (Simple RGBW 8-Bit Mode)

DMX Channel	Parameter	Range DMX	Range%	Default - recom- mended console default values	Description
1	Master Intensity	0 - 255	0 - 100%	0	8-bit control for Intensity of LED settings.
2	Strobe	0 - 255	0 - 100%	0	Controls strobe operations as follows: Open = DMX 0 - 2 Closed = DMX 3 - 5 Slow Rand = DMX 6 - 7 Med Rand = DMX 8 - 10 Fast Rand = DMX 11 - 12 Strobe Range = DMX 13 - 127 (fastest) Pulse + Slow Rand = DMX 128 - 129 Pulse + Med Rand = DMX 130 - 131 Pulse + Fast Rand = DMX 132 - 133 Pulse + Range = DMX 134 - 191 Pulse - Slow Rand = DMX 194 - 195 Pulse - Fast Rand = DMX 196 - 197 Pulse - Range = DMX 198 - 255
3	Red 1-6	0 - 255	0 - 100%	0	8-bit control of Red LEDs.
4	Green 1-6	0 - 255	0 - 100%	0	8-bit control of Green LEDs.
5	Blue 1-6	0 - 255	0 - 100%	0	8-bit control of Blue LEDs.
6	White 1-6	0 - 255	0 - 100%	0	8-bit control of White LEDs.



6. RGBW Simple 8-Bit Group Modes

Table 16 provides DMX channel mapping of all DMX512 control values when the SL BAR 520 RGBW LED Luminaire is operated in various RGBW Simple 8-bit DMX512 Group Control Modes.

Table 20: SL BAR 520 RGBW LED Luminaire DMX Channel Mapping (RGBW Simple 8-Bit Group Modes)

	RGBW Simple 8 BIT MODE						
DMX CHANNEL	6 Group MODE	3 Group MODE	2 Group MODE	1 Group MODE			
1	Master Intensity	Master Intensity	Master Intensity	Master Intensity			
2	Strobe	Strobe	Strobe	Strobe			
3	Red_1	Red_1-2	Red_1-3	Red_1-6			
4	Green_1	Green_1-2	Green_1-3	Green_1-6			
5	Blue_1	Blue_1-2	Blue_1-3	Blue_1-6			
6	White_1	White_1-2	White_1-3	White_1-6			
7	Red_2	Red_3-4	Red_4-6				
8	Green_2	Green_3-4	Green_4-6				
9	Blue_2	Blue_3-4	Blue_4-6				
10	White_2	White_3-4	White_4-6				
11	Red_3	Red_5-6					
12	Green_3	Green_5-6					
13	Blue_3	Blue_5-6					
14	White_3	White_5-6					
15	Red_4						
16	Green_4						
17	Blue_4						
18	White_4						
19	Red_5						
20	Green_5						
21	Blue_5						
22	White_5						
23	Red_6	Note: Refer to	previous DMX manni	ng information for Color			
24	Green_6	 Note: Refer to previous DMX mapping information for Colo Presets, Strobe, Duration, Intensity Timing, Color Timing, an 					
25	Blue_6	· · ·					
26	White_6	Control channe	is.				

7. HSIC Mode

Table 21 provides DMX channel mapping of all DMX512 control values when the SL BAR 520 RGBW LED Luminaire is in HSIC (Hue, Saturation, Intensity, and Color Correction) DMX512 mode (as set by the luminaire's menu system).

Table 21: SL BAR 520 RGBW LED Luminaire DMX Channel Mapping (HSIC Mode)

DMX Channel	Parameter	Range DMX	Range%	Default - recom- mended console default values	Description
1	Master Intensity	0 - 255	0 - 100%	0	8-bit control for Intensity of LED settings.
2	Strobe	0 - 255	0 - 100%	0	Controls strobe operations as follows: Open = DMX 0 - 2 Closed = DMX 3 - 5 Slow Rand = DMX 6 - 7 Med Rand = DMX 8 - 10 Fast Rand = DMX 11 - 12 Strobe Range = DMX 13 - 127 (fastest) Pulse + Slow Rand = DMX 130 - 131 Pulse + Hed Rand = DMX 130 - 131 Pulse + Fast Rand = DMX 132 - 133 Pulse + Range = DMX 134 - 191 Pulse - Slow Rand = DMX 192 - 193 Pulse - Med Rand = DMX 194 - 195 Pulse - Fast Rand = DMX 196 - 197 Pulse - Range = DMX 198 - 255
3	Duration	0 - 255	0 - 100%	0	Strobe Duration is 0 - 85 0 = DMX 0 1 = DMX 1 - 3 x = (DMX Value-1)/3+1 85 = DMX 253-255
4	Timing	0 - 255	0 - 100%	255	Allows for timing control of intensity and color parameters. Channel should default to 255 for smoothest actions using console and/or manual fades.
5	Control	0 - 255	0 - 100%	0	Control Channel functions of the SL Series products. Set control channel value from 0 then turn to desired action. Hold value for at least 5 seconds, then turn to 0. Set control channel value to 0 without any scaling. Default Setting on Console = DMX 0-4 DIM Response Normal = DMX 5 - 9 DIM Response Incandescent = DMX 10 - 14 Dimming Curve_Linear = DMX 35 - 34 Dimming Curve_Square = DMX 45 - 39 Dimming Curve_PL-Curve = DMX 45 - 49 Calibration_OFF = DMX 70 - 74 Calibration_ON = DMX 75 - 79 Fan_Auto = DMX 80 - 84 Fan_Off = DMX 85 - 89 Reserved (Future use) = DMX 90 - 250
6	Hue 1-6, High Byte	0 - 65535	0 - 100%	0	16-bit control of Hue 0 - 359°
7	Hue 1-6, Low Byte	0.055	0.4000/		
8	Saturation 1-6	0 - 255	0 - 100%	0	8-bit control of Saturation.
9	Intensity 1-6	0 - 255	0 - 100%	0	8-bit control for Intensity.
10	CCT 1-6	0 - 255	0 - 100%	0	Variable control of correlated color temperature as follows: Channel OFF (disabled) DMX 0 - 5 2700K - 6500K. DMX 6 - 255



8. HSIC Group Modes

Table 16 provides DMX channel mapping of all DMX512 control values when the SL BAR 520 RGBW LED Luminaire is operated in various HSIC DMX512 Group Control Modes.

Table 22: SL BAR 520 RGBW LED Luminaire DMX Channel Mapping (HSIC Group Modes)

HSIC MODE							
DMX CHANNEL	6 Group MODE	3 Group MODE	2 Group MODE	1 Group MODE			
1	Master Intensity	Master Intensity	Master Intensity	Master Intensity			
2	Strobe	Strobe	Strobe	Strobe			
3	Duration	Duration	Duration	Duration			
4	Timing	Timing	Timing	Timing			
5	Control	Control	Control	Control			
6	Hue_1 - High Byte	Hue_1-2 - High Byte	Hue_1-3 - High Byte	Hue_1-6 - High Byte			
7	Hue_1 - Low Byte	Hue_1-2 - Low Byte	Hue_1-3 - Low Byte	Hue_1-6 - Low Byte			
8	Saturation_1	Saturation_1-2	Saturation_1-3	Saturation_1-6			
9	Intensity_1	Intensity_1-2	Intensity_1-3	Intensity_1-6			
10	CCT_1	CCT_1-2	CCT_1-3	CCT_1-6			
11	Hue_2 - High Byte	Hue_3-4 - High Byte	Hue_4-6 - High Byte				
12	Hue_2 - Low Byte	Hue_3-4 - Low Byte	Hue_4-6 - Low Byte				
13	Saturation_2	Saturation_3-4	Saturation_4-6				
14	Intensity_2	Intensity_3-4	Intensity_4-6				
15	CCT_2	CCT_3-4	CCT_4-6				
16	Hue_3 - High Byte	Hue_5-6 - High Byte					
17	Hue_3 - Low Byte	Hue_5-6 - Low Byte					
18	Saturation_3	Saturation_5-6					
19	Intensity_3	Intensity_5-6					
20	CCT_3	CCT_5-6					
21	Hue_4 - High Byte						
22	Hue_4 - Low Byte						
23	Saturation_4						
24	Intensity_4						
25	CCT_4						
26	Hue_5 - High Byte						
27	Hue_5 - Low Byte						
28	Saturation_5						
29	Intensity_5						
30	CCT 5						
31	Hue_6 - High Byte						
32	Hue_6 - Low Byte	Note: Refer to	nrevious DMX mann	ing information for Co			
33	Saturation 6	Note: Refer to previous DMX mapping information for Colo Presets, Strobe, Duration, Intensity Timing, Color Timing, an					
34	Intensity_6						
35	CCT 6	Control channels.					

Showline

9. SL BAR 520 RGBW LED Luminaire DMX Timing Channel Detail

Timing channel control improves the timed moves of certain groups of parameters. The SL BAR 520 RGBW LED Luminaire provides timing channels in 16-bit mode (one for intensity time and one for color time) and one timing channel in 8-bit (color and intensity timing combined). The luminaire uses its timing channel value to calculate a smooth continuous operation for a given time and transition.

Guidelines:

- Timing channels support time values from zero to 60 minutes.
- To use a timing channel instead of console timing, it is recommended to set the timing channel to the desired value and set cue and/or console cue fade time to zero. A combination of time controls can produce unexpected results.
- The default value setting in the profile should be 255 (proportional control) to allow smooth operation when using
 console timing.
- The timing channel data should change as a snap. A zero value will give the fastest operation, however, without any smoothing this can appear "steppy" in console timed moves.

Refer to "SL BAR 520 RGBW LED Luminaire DMX Timing Channel Detail" for more information.

Table 23: SL BAR 520 RGBW LED Luminaire Timing Channel Detail

% Value	DMX	= Seconds (unless noted)
0	0	0 (Full Speed)
	1	0.2
	2	0.4
1	3	0.6
	4	0.8
2	5	1
	6	1.2
	7	1.4
3	8	1.6
	9	1.8
4	10	2
	11	2.2
	12	2.4
5	13	2.6
	14	2.8
6	15	3
	16	3.2
	17	3.4
7	18	3.6
	19	3.8
8	20	4
	21	4.2
	22	4.4
9	23	4.6
	24	4.8
10	25	5
	26	5.2
	27	5.4
11	28	5.6
	29	5.8
	30	6
12	31	6.2



Table 23: SL BAR 520 RGBW LED Luminaire Timing Channel Detail

% Value	DMX	= Seconds (unless noted)
	32	6.4
13	33	6.6
	34	6.8
	35	7.0
14	36	7.2
	37	7.4
15	38	7.6
	39	7.8
	40	8
16	41	8.2
	42	8.4
17	43	8.6
	44	8.8
	45	9
18	46	9.2
	47	9.4
19	48	9.6
	49	9.8
	50	10
20	51	10.2
	52	10.4
	53	10.6
21	54	10.8
	55	11
22	56	11.2
	57	11.4
	58	11.6
23	59	11.8
20	60	12
24	61	12.2
21	62	12.4
	63	12.6
25	64	12.8
25	65	13
26	66	13.2
20	67	13.4
	68	13.6
27		13.8
21	69 70	14
20		
28	71	14.2
	72	14.4
20	73	14.6
29	74	14.8
20	75	15
30	76	15.2
	77	15.4
2.	78	15.6
31	79	15.8
	80	16
	81	16.2
32	82	16.4



Table 23: SL BAR 520 RGBW LED Luminaire Timing Channel Detail

% Value	DMX	= Seconds (unless noted)
	83	16.6
33	84	16.8
	85	17
	86	17.2
34	87	17.4
<u> </u>	88	17.6
35	89	17.8
	90	18
	91	18.2
36	92	18.4
	93	18.6
37	94	18.8
31	95	19
	96	19.2
20		
38	97	19.4
20	98	19.6
39	99	19.8
	100	20
	101	21
40	102	22
	103	23
	104	24
41	105	25
	106	26
42	107	27
	108	28
	109	29
43	110	30
	111	31
44	112	32
	113	33
	114	34
45	115	35
	116	36
46	117	37
	118	38
	119	39
47	100	40
	121	41
48	122	42
	123	43
	124	44
49	125	45
	126	46
	127	47
50	128	48
	129	49
51	130	50
<u> </u>	131	51
	132	52
52	133	53
JZ	100	55



Table 23: SL BAR 520 RGBW LED Luminaire Timing Channel Detail

% Value	DMX	= Seconds (unless noted)
	134	54
53	135	55
	136	56
	137	57
54	138	58
	139	59
55	140	60
	141	61
	142	62
56	143	63
	144	64
57	145	65
	146	66
	147	67
58	148	68
	149	69
59	150	70
	151	71
	152	72
60	153	73
	154	74
	155	75
61	156	76
01	157	77
62	158	78
02	159	79
	160	80
62		<u> </u>
63	161	81
0.4	162	82
64	163	83
	164	84
	165	85
65	166	86
	167	87
66	168	88
	169	89
	170	90
67	171	91
	172	92
68	173	93
	174	94
	175	95
69	176	96
	177	97
	178	98
70	179	99
	180	100
71	181	101
	182	102
	183	103
72	184	104



Table 23: SL BAR 520 RGBW LED Luminaire Timing Channel Detail

% Value	DMX	= Seconds (unless noted)
	185	105
73	186	106
	187	107
	188	108
74	189	109
	190	110
75	191	111
	192	112
	193	113
76	194	114
	195	115
77	196	116
	197	117
	198	118
78	199	119
	200	100
79	201	121
	202	122
	203	123
80	204	124
	205	125
81	206	126
<u> </u>	207	127
	208	128
82	209	129
02	210	130
	211	131
83	212	132
00	213	133
84	214	134
04	215	135
	216	136
85	217	137
00	218	138
86	219	139
80	220	140
	221	141
07	222	141
87		
00	223	143
88	224	144
	225	145
00	226	146
89	227	147
	228	148
00	229	149
90	230	150
0.1	231	151
91	232	152
	233	153
	234	154
92	235	155



Table 23: SL BAR 520 RGBW LED Luminaire Timing Channel Detail

% Value	DMX	= Seconds (unless noted)
	236	156
93	237	157
	238	158
	239	159
94	240	160
	241	161
95	242	162
	243	163
	244	164
96	245	165
	246	5 Minutes
97	247	15 Minutes
	248	30 Minutes
	249	60 Minutes
98	250*	60mS
	251*	80mS
99	252*	100mS
	253*	100mS
	254*	140mS
100	255* (default)	160mS

Note: * DMX values 250 to 255 provide smoothing when using console fade timing. DMX value 255 (recommended default) will provide the smoothest timing.



10. SL BAR 520 RGBW LED Luminaire RDM Parameter IDs

The following tables outline and describe all the RDM parameters IDs associated with SL BAR 520 RGBW LED Luminaires.

- Table 24, "SL BAR 520 RGBW LED Luminaire RDM Product Parameters IDs"
- Table 25, "SL BAR 520 RGBW LED Luminaire RDM UID"
- Table 26, "SL BAR 520 RGBW LED Luminaire RDM Parameters IDs," on page 46
- Table 27, "SL BAR 520 RGBW LED Luminaire RDM Manufacturer Status IDs," on page 47
- Table 28, "SL BAR 520 RGBW LED Luminaire RDM Manufacturer Specific PIDs for Root Device," on page 48
- Table 29, "SL BAR 520 RGBW LED Luminaire RDM Manufacturer Specific PIDs for Sub Device," on page 48

Table 24: SL BAR 520 RGBW LED Luminaire RDM Product Parameters IDs

Model ID	Manufacturer	Model Description	Product Category
0x1160	Philips Entertain. Lighting Asia	SL BAR 520 (RGBW)	0x0509

Table 25: SL BAR 520 RGBW LED Luminaire RDM UID

UID						
MSB of ESTA	LSB of ESTA	1st of	2nd of	3rd of	4th of	
50H	41H	Unique Seq.	Unique Seq.	Unique Seq.	Unique Seq.	



Table 26: SL BAR 520 RGBW LED Luminaire RDM Parameters IDs

Get Allowed	Set Allowed	RDM Parameter IDs	Value	Comment	Implemented						
Category - Network Management											
		DISC_UNIQUE_BRANCH	0x0001								
DISC_MUTE		DISC_MUTE	0x0002								
	DISC_UN_MUTE		0x0003								
		PROXIED_DEVICES	0x0010								
		PROXIED_DEVICES_COUNT	0x0011								
		COMMS_STATUS	0x0015								
	1	Category - Status (Collection	T							
		QUEUED_MESSAGE	0x0020								
		STATUS_MESSAGES	0x0030								
		STATUS_ID_DESCRIPTION	0x0031								
		CLEAR_STATUS_ID	0x0032								
		SUB_DEVICE_STATUS_REPORT_THRESHOLD	0x0033								
	T	Category - RDM In	formation								
•		SUPPORTED_PARAMETERS	0x0050	Support required only if supporting Parameters beyond the minimum required set.	•						
•		PARAMETER_DESCRIPTION	0x0051	Support required for Manufacturer-Specific PIDs exposed in SUPPORTED_ PARAMETERS message.	•						
		Category - Product I	Information								
		DEVICE_INFO	0x0060								
		PRODUCT_DETAIL_ID_LIST	0x0070								
		DEVICE_MODEL_DESCRIPTION	0x0080								
		MANUFACTURER_LABEL	0x0081								
		DEVICE_LABEL	0x0082								
		FACTORY_DEFAULTS	0x0090								
		LANGUAGE_CAPABILITIES	0x00A0								
		LANGUAGE	0x00B0								
		SOFTWARE_VERSION_LABEL	0x00C0								
		BOOT_SOFTWARE_VERSION_ID	0x00C1								
		BOOT_SOFTWARE_VERSION_LABEL	0x00C2								
		Category - DMX5	12 Setup								
		DMX_PERSONALITY	0x00E0								
		DMX_PERSONALITY_DESCRIPTION	0x00E1								
		DMX_START_ADDRESS	0x00F0 Required if device uses a DMX Slot								
		SLOT_INFO 0x0120									
		SLOT_DESCRIPTION	0x0121								
		DEFAULT_SLOT_VALUE	0x0122								
		Category - Sensor	rs 0x02xx								
		SENSOR_DEFINITION	0x0200								
		SENSOR_VALUE	0x0201								



Table 26: SL BAR 520 RGBW LED Luminaire RDM Parameters IDs

Get Set RDM Parameter IDs			Value	Comment	Implemented
		RECORD_SENSORS	0x0202		
		Category - Dimmer Settings	0x03xx - FUTURE USE		
	T T	Category - Power / Lam	p Settings 0x04xx		
		DEVICE_HOURS	0x0400		
		LAMP_HOURS	0x0401		
		LAMP_STRIKES	0x0402		
		LAMP_STATE	0x0403		
		LAMP_ON_MODE	0x0404		
		DEVICE_POWER_CYCLES	0x0405		
		Category - Display S	Settings 0x05xx		
		DISPLAY_INVERT	0x0500		
		DISPLAY_LEVEL	0x0501		
		Category - Configu	ration 0x06xx		
		PAN_INVERT	0x0600		
		TILT_INVERT	0x0601		
		PAN_TILT_SWAP	0x0602		
		REAL_TIME_CLOCK	0x0603		
		Category - Cont	trol 0x10xx		
		IDENTIFY_DEVICE	0x1000		
		RESET_DEVICE	0x1001		
		POWER_STATE	0x1010		
		PERFORM_SELFTEST	0x1020		
		SELF_TEST_DESCRIPTION	0x1021		
		CAPTURE_PRESET	0x1030		
		PRESET_PLAYBACK	0x1031		

Table 27: SL BAR 520 RGBW LED Luminaire RDM Manufacturer Status IDs

Manufacturer Specific messages are in the range of 0x8000 - 0xFFDF. Each Manufacturer-specific Status ID shall have a unique meaning, which shall be consistent across all products having a given Manufacturer ID. See Table B-2, ANSI E1.20-2010.

Status ID Message	Value	Value Data Value 1		Status ID Description	
8100H		00H	00H	ALL OK	



Table 28: SL BAR 520 RGBW LED Luminaire RDM Manufacturer Specific PIDs for Root Device

Get Allowed	Set Allowed	RDM Parameter IDs	Туре	Length	Unit	Prefix	Min	Max	Default	Description
	Category - Manufacturer Defined PIDs - Range is 0x8000-0xffdf (See ANSI E1.20-2010 Standard, Table A-3)									
		8A00H	U8	1	None	None	0	100	100	DIMMER
		8AB2H	U8	1	None	None	1	18	1	Chase
		8AB0H	U8	1	None	None	0	43	0	Color Filter
		8AB1H	U8	1	None	None	0	31	0	Preset
		8A92H	U8	1	None	None	0	255	0	Strobe
		8A94H	U8	1	None	None	0	255	0	Duration
		8AC0H	U8	1	None	None	0	255	255	Intensity Timing
		8AC2H	U8	1	None	None	0	255	255	Color Timing
		8A40H	U8	1	None	None	0	1	0	Link Mode
		8A42H	U8	1	None	None	0	1	0	Incandescent Effect
		8AA1H	U8	1	None	None	0	3	0	Dimming Curve
		8A0CH	U8	1	None	None	0	3	0	DMX Fail Mode
		8AA0H	U8	1	None	None	0	4	0	Backlight Off Time
		8AA2H	U8	1	None	None	0	94	0	Power Up Setup
		8A44H	U8	1	None	None	0	1	0	Calibration ON/OFF Setup
		8A41H	U8	1	None	None	0	1	0	Lock Fixture

Table 29: SL BAR 520 RGBW LED Luminaire RDM Manufacturer Specific PIDs for Sub Device

Get Allowed	Set Allowed	RDM Parameter IDs	Туре	Length	Unit	Prefix	Min	Max	Default	Description
	Category - Manufacturer Defined PIDs - Range is 0x8000-0xffdf (See ANSI E1.20-2010 Standard, Table A-3)									
		8A04H	U8	1	None	None	0	100	100	Dimmer RED
		8A05H	U8	1	None	None	0	100	100	Dimmer GREEN
		8A06H	U8	1	None	None	0	100	100	Dimmer BLUE
		8A07H	U8	1	None	None	0	100	100	Dimmer WHITE

CLEANING AND CARE



WARNING! All cleaning should be performed with power completely removed from the luminaire. Never remove protective covers when luminaire is powered. Wear appropriate protective eye wear and gloves when cleaning the fixture. All service and maintenance, other than described herein, should be performed by a qualified technician or Authorized Service Center.

1. Special Cleaning and Care Instructions

Being a solid-state fixture, and unlike most fixtures, the SL BAR 520 RGBW LED Luminaire requires very little routine maintenance by the user. This section covers portions of the luminaire that can be removed for cleaning.

The SL BAR 520 RGBW LED Luminaire special care when it comes to cleaning front lens assembly. Additional care needs to be taken with the plastic components because they are much easier to scratch or damage than glass.

The following is a list of cleaning materials required to care for your SL BAR 520 RGBW LED Luminaire:

- Lint free lens tissue
- · Lint or powder free gloves
- Reagent grade isopropyl alcohol*
- A mild soap solution.

Note: *Reagent grade isopropyl alcohol is good to use on the SL BAR 520 RGBW LED Luminaire plastic optics with anti-reflection coatings.

If the lens is still dirty after using isopropyl alcohol, for instance if fingerprints or oil is just redistributed and not cleaned off the optic, then a mild soap and water solution can be used to gently wash the lens. Repeat the cleaning with isopropyl alcohol to eliminate streaks and soap residue.



WARNING! Under no circumstances should ammonia-based cleaners, acetone, or other harsh solvents be used on or near the SL BAR 520 RGBW LED Luminaire. These types of cleaners or solvents can permanently damage the optics or housings of the fixture.

If you have any questions regarding the use or care of your SL BAR 520 RGBW LED Luminaire, please contact Showline technical support or your local Authorized Dealer.

2. Front Lens Cleaning

To clean the front lens:

- Step 1. Disconnect luminaire from power and allow to cool completely.
- Step 2. Apply a small amount of reagent grade isopropyl alcohol to lint-free lens tissue.
- Step 3. Wipe all debris, dirt, fingerprints, etc. from lens.
- Step 4. Using a second lint-free lens tissue, wipe off any alcohol residue.

3. Service and Maintenance

For all other service and maintenance issues, please contact your local Showline office or an Authorized Service Center.



WARNING! Disassembly (other than as described herein), alterations, unauthorized service, etc. will void the product warranty. Contact your local Showline office or an Authorized Service Center for technical support and service.



TECHNICAL SPECIFICATIONS

1. SL BAR 520 RGBW LED Luminaire Operational Specifications

Source: Color RGBW LED Array (x6 - 40 Watt High Power LED Chipsets)

Beam Angle: 8 Degrees
Light Output: > 8,000 lumens

Color Temperature: 2700 - 6500K (user adjustable)
Input Voltage (AC): 100V to 240V (+/- 10%, auto-ranging)
Current (AC): 3.00 Amps (100V) / 1.25 Amps (240V)

Frequency: 50/60Hz

Control Protocols: DMX512 (1990) / DMX512A (RDM) / On-Board Menu

Ambient Temperature: -20 to 40 Degrees C (-4 to 104 Degrees F)

Humidity: 5%-95% Non condensing

Cooling: Forced Air Cooling

Weight: 19.4 lbs (8.8 kg) - Luminaire only (no accessories)

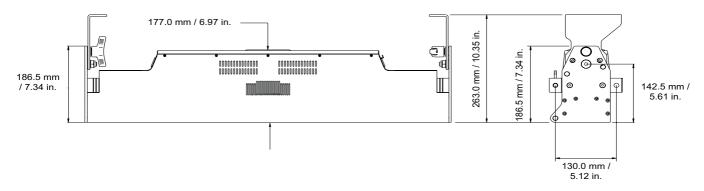
Housing: Die Cast Aluminium with Powder Coating

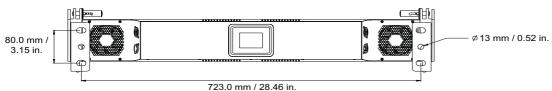
Compliance: cETLus Marked (North American models) and CE Marked (International models)

IP Rating: IP20

Note: Common model specifications shown. For specific model specifications, features, and accessories, refer to the product specification sheet for more details.

2. SL BAR 520 RGBW LED Luminaire Dimensions









Notes



Showline

Dallas 10911 Petal Street Dallas, TX 75238 Tel: +1 214-647-7880

Fax: +1 214-647-8031

Hong Kong Unit C, 14/F, Roxy Industrial Centre No. 41-49 Kwai Cheong Road Kwai Chung, N.T., Hong Kong

Tel: +852 2796 9786 Fax: +852 2798 6545

Auckland 19-21 Kawana Street Northcote, Auckland 0627 New Zealand

Tel: +64 9 481 0100 Fax: +64 9 481 0101

Europe Rondweg zuid 85 Winterswijk 7102 JD The Netherlands

Tel: +31 (0) 543-542516



©2013 Philips Group